

## REMARKS

### Rejection Under 35 U.S.C. §102

The Examiner rejected Claim 1 under 35 U.S.C. § 102(b) as being anticipated by Ali et al. (J. Biol. Chem., Vol. 266, No. 30, pp. 20110-20117, 1991). Applicant respectfully traverses this objection.

The Examiner states that Ali et al. disclose “synthesizing a peptide (isolation of peptide) having at least 70% homology . . . .” The Examiner directs Applicant to Figure 1, Panel c and Figure 4 of Ali et al. Neither of these figures illustrates the synthesis of a peptide. Indeed, Figure 1, panel c refers to DNA and not the “synthesis” of peptide (or protein). Nor does Figure 4 disclose the synthesis of peptide. Figure 4 is merely a schematic representation of different prolactin receptors. Peptide synthesis is not mentioned nor is there any evidence peptides were ever synthesized. Nowhere in Ali et al. was there synthesis of a peptide having at least 70% homology to the missing region. For this reason alone, Ali et al. does not anticipate the claim.

The Examiner additionally found that Ali et al. disclose “testing said peptide for activity as an antagonist to the ligand for the receptor or to the cell which expresses the receptor of the ligand.” Nowhere in Ali et al. does it disclose testing of a peptide corresponding to the missing region. The Examiner acknowledges this on page 3, 3<sup>rd</sup> paragraph when it states that Ali et al. disclose “testing (characterization of activity) said peptide **PRL-R (short form)** for activity as an antagonist to the cell . . . .” In Ali et al., the entire short form prolactin receptor (PRL-R) was tested. The claim requires that the peptide corresponding to the missing region be tested. Ali et al. does not disclose this. Moreover, Ali et al. did not test the PRL-R short form receptor for its antagonizing effects. Ali et al. merely measured the differential binding coefficients of prolactin to the short form receptor.

For anticipation under 35 U.S.C. § 102, the reference must teach every aspect of the claimed invention either explicitly or impliedly. As Applicant has convincingly demonstrated, Ali does not teach every aspect of the claimed invention. Thus, withdrawal of the anticipation rejection is respectfully requested.

**Rejections Under 35 U.S.C. §103**

The Examiner rejected Claims 4, 23-25 under 35 U.S.C. § 103(a) as being unpatentable over Ali et al. in view of Kelly et al. (U.S.P.N. 6,083,753). Applicant traverses this rejection for the same reasons stated above. Neither Ali et al. nor Kelly et al. disclose the synthesis of a peptide having at least 70% homology to the "missing region." Nor do Ali et al. or Kelly et al. disclose testing of a peptide directed to the "missing region" "for activity as an antagonist to the ligand for the receptor or to the cell which expresses the receptor of the ligand." Since the references cited by the Examiner do not meet all the limitations of any of the claims of the application, Applicant respectfully requests that this rejection be removed.

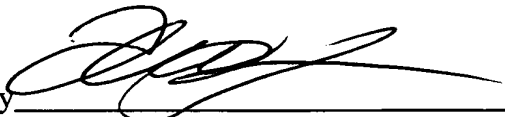
**Conclusion**

Applicant submits that the claims are in condition for allowance, and such action is respectfully requested.

A check in the amount of \$60.00 is enclosed to cover the Petition fee. Please charge any additional fees or credit any overpayments as a result of the filing of this paper to our Deposit Account No. 02-3978 – a duplicate of this paper is enclosed for that purpose.

Respectfully submitted,

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